



## Overweight and Weight Control among Rhode Island Girls and Women, 2003

Jana E. Hesser, PhD, and Donald K. Perry, MPA

Reducing the proportion of Rhode Island adults who are obese and reducing the proportion of Rhode Island youth who are overweight and obese are Healthy Rhode Islanders 2010 (HRI2010) objectives.<sup>1,2</sup> HRI2010 strategies promote increased physical activity and increased fruit and vegetable consumption.<sup>2</sup>

This paper presents data for Rhode Island girls and women on overweight/obesity, weight control strategies, physical activity, and fruit and vegetable consumption based on two Rhode Island surveys performed in 2003 — the Behavioral Risk Factor Surveillance System (BRFSS) and the Youth Risk Behavior Survey (YRBS).

**Methods.** The BRFSS is a telephone survey of randomly selected non-institutionalized adults ages 18 and older. It is administered in all 50 states and 4 U.S. territories with funding and methodological specifications provided by the federal Centers for Disease Control and Prevention (CDC).<sup>3</sup> In 2003, RI's BRFSS interviewed 4,053 RI adults.

The YRBS is an anonymous and voluntary survey conducted in alternate years among randomly selected high schools and students. The CDC sponsors the YRBS in states and localities nationwide.<sup>4</sup> In spring 2003 the Rhode Island Departments of Education and Health administered the YRBS to 1,814 Rhode Island public school students in grades 9 through 12.

In 2003 both the Rhode Island BRFSS and YRBS collected information about height and weight, which are used to calculate body mass index (BMI); participation in physical activity; fruit and vegetable consumption; and weight control efforts.

The two surveys asked similar questions about weight control efforts — Are you now trying to lose weight? Are you now trying to keep from gaining weight? Are you eating fewer calories or less fat to lose or maintain weight? Are you exercising to lose or maintain weight? In addition, the YRBS asked about several high-risk weight loss behaviors that adolescents may use.

For both surveys CDC derives two variables for physical activity and one measure for fruit and vegetable consumption. For physical activity the variables are: "meets guidelines for recommended level of moderate or vigorous physical activity" (30 minutes a day five or more days a week, or 20 minutes or more of vigorous physical activity 3 or more days a week); and "engages in no physical activity." The dietary measure is "meets guidelines for fruit and vegetable consumption" (five or more servings of fruits and vegetables a day). Prevalence estimates for all variables were calculated for high school girls (YRBS), and for women in four age groups (BRFSS).

**Results.** The proportion of females who are overweight increases with age, from 21% of adolescents who are at risk for overweight or overweight, to 32% of women ages 18–24 who are overweight or obese, up to 56% of women ages 65 and older. While 21% of girls are at risk for or overweight, 35% describe themselves as slightly or very overweight. (Table 1)

**Table 1. Overweight and Obesity Among High School Girls and Women Ages 18 and Older, Rhode Island 2003**

Weight Measure	Girls Grades 9–12	Women				
		Ages 18–24	Ages 25–44	Ages 45–64	Ages 65+	Ages 18+
At risk of overweight*	15%					
Overweight**		21%	25%	31%	40%	30%
Overweight***	6%					
Obese****		11%	18%	23%	16%	18%
Self-perceived overweight	35%	NA	NA	NA	NA	NA

\* At or above the 85th percentile but below the 95th percentile for BMI for age and sex, based on data from the National Health and Nutrition Examination Survey I (NHANES I)<sup>5</sup>

\*\* BMI  $\geq 25$  and  $< 30$

\*\*\* At or above the 95th percentile for BMI for age and sex based on NHANES I

\*\*\*\* BMI  $\geq 30$

Eighty percent or more of girls and women up to age 64 and 75% of those 65 and older are either trying to lose weight or keep from gaining weight. Sixty-one percent of girls and nearly half of all women are trying to lose weight. (Table 2) Three times as many girls are trying to lose weight as are at risk or overweight, and 50% more women ages 18–24 are trying to lose weight than are overweight or obese.

Half or more of girls and women up to age 64 and one-third of women ages 65 and older are using both calorie restriction and physical activity to lose or maintain weight. The proportion using dieting alone increases with age from 7% of girls to 36% of women ages 65 and older, while the proportion using exercise alone decreases from 23% of girls to 9% of women ages 65 and older. (Table 2)

## — Health by Numbers —

**Table 2. Strategies and Objectives for Losing or Maintaining Weight Among High School Girls and Women Ages 18 and Older, Rhode Island 2003.**

Weight Control	Girls Grades 9–12	Women				
		Ages 18-24	Ages 25-44	Ages 45-64	Ages 65+	Ages 18+
<b>Objective:</b>						
Lose weight	61%	48%	49%	56%	40%	49%
Maintain weight	19%	37%	38%	32%	35%	36%
<b>Weight loss strategy (for those trying to lose or maintain weight):</b>						
Just fewer calories/less fat	7%	13%	17%	26%	36%	23%
Just exercise	23%	22%	16%	8%	9%	13%
Both fewer calories and exercise	58%	52%	55%	58%	38%	52%
Fasted 24 + hours	17%	NA	NA	NA	NA	NA
Took diet meds*	8%	NA	NA	NA	NA	NA
Vomited/took laxatives	6%	NA	NA	NA	NA	NA

\*Without doctor's advice

The YRBS also asked girls about high risk behaviors to lose or maintain weight; e.g., fasting for 24 hours or more (17%); using diet pills, powders or liquids without a doctor's advice (8%); and vomiting or using laxatives (6%). (Table 2)

High school girls and women ages 18–24 have the lowest proportion (26%) meeting the recommended fruit and vegetable guidelines. Women 65 and older have the highest percentage meeting this guideline (41%). (Table 3)

Girls (60%) and women ages 18–24 (57%) have the highest proportion meeting the recommended guidelines for moderate or vigorous physical activity. The proportion declines with age to 28% for women ages 65 and older. Only 10% of girls do not participate in any moderate or vigorous physical activity while the proportion of women who do not participate in any leisure time physical activity increases from 21% of those ages 18–24 to 40% of women ages 65 and older. (Table 3)

**Discussion.** Addressing the epidemic of overweight and obesity in the U.S. requires, in part, the individual intention to manage weight. Three quarters or more of Rhode Island girls and women surveyed in 2003 were trying to lose or maintain their weight, which may suggest a healthy intent. However, with the exception of women over age 65, a higher percentage of females, especially girls, are trying to lose weight than are actually estimated to be overweight, which signals a potential health risk.

Close to 90% of girls and women trying to lose or maintain their weight report doing so by restricting calories or fat, by

exercising, or both. While a high percentage report that they exercise to control weight, a lower percentage report participation in the recommended level of either moderate or vigorous physical activity. A difference of about 20 percentage points between the two estimates is consistent across all age groups.

Likewise, the low proportion of girls and women eating the recommended 5 or more servings of fruits and vegetables is discrepant with the high proportion saying they are eating fewer calories or less fat to manage their weight.

Several observations from this analysis can inform public health interventions designed to address the obesity “epidemic.”

First, the discrepancy between the high level of weight management actions of girls and women and their reported physical activity and fruit and vegetable intake practices suggests greater effort is needed to help the public recognize the amount of exercise and types of food that can be most effective for weight management. Second, the use of some risky weight loss practices by high school girls may indicate a low salience of health concerns in their choice of weight reduction and maintenance strategies. There is need to reinforce public health messages about the health-related risks of overweight and obesity and about healthy exercise and dietary weight loss strategies. Given the large proportion of girls and women trying to lose weight who may not actually be overweight, efforts must also address when it is appropriate and healthy to engage in weight loss strategies.

*Jana Hesser, PhD, is Program Manager for Health Surveys and BRFSS Project Director, Center for Health Data and Analysis, Rhode Island Department of Health, and Clinical Assistant Professor in Community Health, Brown Medical School.*

*Donald Perry, MPA, is Health Policy Analyst, Center for Health Data and Analysis, Rhode Island Department of Health, and Manager for school-based surveys.*

### References

1. *Rhode Island Obesity Control Program: A Public Health Approach to Addressing Overweight and Obesity among Children and Adults.* Health Policy Brief No. 02 - 02. Providence RI: Rhode Island Department of Health. August 2002.
2. *A Healthier Rhode Island by 2010: A Plan for Action.* Providence RI: Rhode Island Department of Health. May 2004.
3. CDC BRFSS website: <http://www.cdc.gov/brfss>
4. CDC YRBS website: <http://www.cdc.gov/HealthyYouth/yrbs/index.htm>
5. Kuczmarski RJ, Ogden CL, et al. CDC growth charts: United States. *Advance Data from Vital and Health Statistics*; no. 314. Hyattsville, Maryland: National Center for Health Statistics. 2000.

### Acknowledgements

The 2003 RI BRFSS was supported in part by the CDC Cooperative Agreement U58/CCU122791.

The 2003 RI YRBS was supported in part by the CDC Cooperative Agreement U87/CCU109023.

**Table 3. Weight-Related Health Behaviors among High School Girls and Women Ages 18 and Older, Rhode Island 2003.**

Weight-Related Health Behavior	Girls Grades 9–12	Women				
		Ages 18-24	Ages 25-44	Ages 45-64	Ages 65+	Ages 18+
<b>Diet:</b>						
Meet guidelines of 5 or more servings of fruits and vegetables per day	26%	26%	31%	30%	41%	32%
<b>Physical Activity:</b>						
Meet guidelines for recommended moderate or vigorous physical activity	60%	57%	55%	48%	28%	53%
Does not participate in physical activity	10%	21%	25%	28%	40%	28%

*Originally published in the October 2005 issue of Medicine & Health / Rhode Island*

**HEALTH**

Rhode Island Department of Health  
Center for Health Data & Analysis  
3 Capitol Hill  
Providence, RI 02908

*Change service requested  
401 222-2550*

PRSRT\_STD  
U.S. Postage  
PAID  
Providence, R.I. 02904  
Permit No. 1286